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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/611,364	07/06/2000	Tetsuya Abe	P19357	6388

7055 7590 12/16/2004

GREENBLUM & BERNSTEIN, P.L.C.  
1950 ROLAND CLARKE PLACE  
RESTON, VA 20191

EXAMINER
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SENF1, BEHROOZ M

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/611,364

**Applicant(s)**

ABE ET AL.

**Examiner**

Behrooz Senfi

**Art Unit**

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

ANDY RAO  
PRIMARY EXAMINER

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant amendment filed Jun. 28, 2004 amends claim 1 and added new claims 15 – 18.

Response to remarks:

Applicant asserts (page 9 of the remarks) that “there is no motivation whatsoever for incorporating the features of Sensui into a stereo camera of Muramoto”.

In-response, examiner respectfully disagrees. The claim language is directed to “a pair of photographing optical system with a variable angle prism” the primary prior art of the reference Muramoto teaches the a pair of photographing optical system used for measuring distance to an object including the controlling of the convergence angle (i.e. fig. 5), but fails to show “variable apex angle prism”, therefore examiner cited the secondary reference Sensui, wherein (col. 7, lines 22 – 23) teaches arrangement of optical elements together with a controlling system and use of variable apex angle prism, to improve the object distance measuring device, which would provide an improved finder system for object distance measuring device as taught by Sensui (i.e. col. 1, lines 19 – 26).

Applicant asserts (in regards to claim 9, page 12 of remarks) that, “both active and passive distance measurements in Saito reference are obtained after release switch is half depressed”.

In-response, examiner respectfully disagrees. Saito reference teaches active and passive distance measurement (that are two different steps) to an object and selecting

Art Unit: 2613

an active distance measurement or a passive distance measurement, which would be controlled by the pressing the switch (abstract, lines 6 – 9, col. 8, lines 34). Therefore, meets the limitations as claimed.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1, 6 - 8, 10, 11 – 14 and 17 - 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muramoto et al (US 6,507,359) in view of Sensui (US 6,041,186).

Regarding claim 1, 8, and 11 - 12, Muramoto '359 discloses the claimed "stereo camera comprising" (Muramoto: fig. 2), and "a pair of photographing optical system that produces a corresponding pair of photographing areas, and are located in a common plane ....." (Muramoto: figs. 4, and 9), and "an object distance measuring device that measures a distance to an object" (Muramoto: figs. 9, and 14, col. 13, lines 1+).

Muramoto '359 discloses (fig. 5, 335, 336, and fig. 20) group lenses and optical mirror (which could be prism) thus being adjusted and controlled in accordance with convergence angle. But fails to explicitly show "prism, and apex angle". However, the above claim limitations are well known and used as evidenced by Sensui '186 (figs. 1b, col. 7, lines 20+ and col. 13, lines 20+). The secondary reference Sensui, wherein (col. 7, lines 22 – 23) teaches arrangement of optical elements together with a controlling

Art Unit: 2613

system and use of variable apex angle prism, to improve the object distance measuring device. Therefore, it would have been obvious to one skilled in the art to use variable apex angle prism as taught by Sensui (i.e. col. 1, lines 19 – 26) as an alternative, to improve the object distance measuring device as taught by Muramoto.

Regarding claim 7, the limitation claimed “stereo camera applied to an electronic still camera” is inherent in combination system of Muramoto '359 and Sensui '186.

Regarding claim 10, combination system of Muramoto '359 and Sensui '186 teach, “active distance measurement” (col. 12, lines 63 – 67 of Muramoto).

Regarding claims 6 and 13 – 14, combination of Muramoto '359 and Sensui '186 teach, “pair of passive distance measuring” (col. 14, lines 24+ of Sensui) and “the measurement point located in an inner half of field angle” reads on conversion angle adjustment as discussed above.

Regarding claims 17 - 18, the limitation “angle of convergence obtained at the one of the optical systems is identical to an angle of convergence obtained at the other of the optical system” reads on combination teaching of Muramoto and Sensui (i.e. fig. 4, col. 8, lines 24 – 27 of Muramoto).

4. Claims 2, 9 and 15 - 16, are rejected under 35 U.S.C. 103(a) as being unpatentable over Muramoto et al (US 6,507,359) in view of Saito (US 5,652,926).

Regarding claim 9, Muramoto '359 discloses the claimed “stereo camera comprising” (Muramoto: fig. 2), and “a pair of photographing optical system that produces a corresponding pair of photographing areas, and are located in a common plane .....” (Muramoto: figs. 4, and 9), and “each including an image pickup device”

Art Unit: 2613

(fig. 2) and “an object distance measuring device that measures a distance to an object” (Muramoto: figs. 9, and 14, col. 13, lines 1+) and “convergence angle adjustment .....” (figs. 5 and 13a, col. 10, lines 53+ and col. 7, lines 44+) and “controller to control each of photographing optical system” (fig. 5, controller 303, and fig. 13a, controller 15).

Muramoto '359 fails to explicitly teach “button/switching for performing active and passive distance measurement”. However, the above features are well known and used as evidenced by Saito '926 (i.e. fig. 1, col. 8, lines 35+). Therefore, taking the combined teaching of Muramoto '359 and Saito '926 as a whole, it would have been obvious to modify the camera system of Muramoto '359 with switching system as taught by Saito '926 to perform distance measurement with a high accuracy (col. 1, lines 45+).

Regarding claim 2, combination of Muramoto '359 and Saito '926 teach, “rotating of each photographing optical system” (fig. Fig. 9, col. 8, lines 5+).

Regarding claims 15 - 16, combination of Muramoto and Saito teach, “controlling each of the pair of photographing optical systems to perform photometering operation” (i.e. fig. 2; Muramoto), and “performing auto-exposure and/or auto-focus operation by pressing the button half way in the camera” are well known and used in the prior art of the record. Official Notice

5. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muramoto et al (US 6,507,359) in view of Saito (US 5,652,926) further in view of Sorimachi et al. (US 4,818,858).

Regarding claim 3, combination of Muramoto '359 and Saito '926 fails to explicitly

Art Unit: 2613

Teach, "the angle adjustment mechanism, with pair of rotary plates and sector worm wheel". However, the above claimed limitation is well known and used as evidenced by Sorimachi '858 (i.e. fig. 2) and "pair of rotary plates having respective center axes of rotation in parallel with each other, pair of rotary plates supporting pair of photographing optical system and having inter-meshing sector gears" and "a sector worm wheel ....." and "a worm which is in mesh ....." (Sorimachi: fig. 2, plates 8 and 9, col. 2, lines 52+, and col. 4, lines 19+ and Muramoto: fig. 19, col. 17, lines 32+). In view of the above, it would have been obvious to one having ordinary skill in the art to modify the combination system of Muramoto and Saito, as taught by Sorimachi, for the benefit of adjusting convergence angle at a high speed with a high accuracy (Sorimachi: col. 1, lines 36 – 39).

Regarding claim 5, combination of Muramoto '359 and Saito and Sorimachi '858 teaches the claimed "drive mechanism which moves at least a part of ....." (Sorimachi: col. 4, lines 25+).

6. Claim 4, is rejected under 35 U.S.C. 103(a) as being unpatentable over Muramoto '359 in view of Saito '926 further in view of Sensui '186.

Regarding claim 4, combination of Muramoto '359 and Saito '926 fails to explicitly teach "variable angle prism". However, the above claim limitations are well known and used as evidenced by Sensui '186 (figs. 1b, col. 7, lines 20+ and col. 13, lines 20+). Therefore, taking the combined teaching of combination system of Muramoto '359 and Saito 926 and Sensui '186 as a whole, it would have been obvious to modify the

combination system of Muramoto '359 and Saito 926 as taught by Sensui '186 for providing a finder system separately from the photographing optical system.

***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Behrooz Senfi** whose telephone number is **(703)305-0132**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Chris Kelley** can be reached on **(703)305-4856**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231



Art Unit: 2613

**Or faxed to:**

**(703) 872-9314**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

B. S. B. Jr.

12/11/2004

ANDY RAO  
PRIMARY EXAMINER

